



YOUR MISSION
Coco's Adventure: From Bean to Bar

MISSION ACCOMPLISHED

After you are done exploring, take your completed mission back to The Shop and share your work with the Expedition Discovery Volunteer to claim your pin!

Date of Exploration: _____

Time of Exploration: _____




Your Mission, Should You Choose to Accept it:
Coco's Adventure: From Bean to Bar

Welcome to A Festival of Chocolate! Explorers, today we are going on an epic adventure through the Garden to learn where chocolate comes from and how it is made.

Whether you a fan or not, Chocolate is one of the most popular flavors in the world! But did you know, chocolate comes from a plant - *Theobroma cacao* (thee-o-brow-muh kuh-kau) or the Cacao Tree.

To go from the tree to the bars takes a lot of work! Let's explore the process.

1. To find cocoa, we need to take a trip to the rainforest. Use your map and explorer skills to find the Rainforest, specifically the **CACAO TREE**, (#29 on the map) 

Welcome to the Rainforest. Here you will meet our Chocolate Experts who are here to help you on your quest. Let's begin!

Cacao trees are picky about where they grow. They like to be where the temperatures are warm, and the air is humid - just like this rainforest. Here you will find a cocoa tree. Take a close look at the tree and where it grows. What do you notice? Is it growing in the bright sun or the shade? Is the tree tall or short? Why do you think that is important?

Draw a picture of you next to the cacao tree?

2. Next, use your map to find The Whitman Tropical Fruit Pavillion (#23 on the map) 

The tropics are home to the world's most amazing fruit trees, some too delicate and cold-sensitive to grow outdoors in Miami! That is why we grow them in a conservatory (or glasshouse) like this one.

Here you will find another cocoa tree and our Experts to help you explore the next station.

Like most trees, the cocoa tree grows flowers. But what makes cocoa a little different is that the flowers grow right out of the trunk.



From the flower grows a **POD** that can hold up to 50 beans. The chocolate we eat is made from those beans.

Check out the cacao pod.

How many beans do you see? _____

- Do the seeds look like the chocolate we eat? _____
- Do they smell like chocolate? _____
- Why or why not? _____

Before we can eat the chocolate, the seeds are harvested, dried and **roasted**. But it's still not ready to eat just yet! Follow the map to find out how the bean becomes chocolate

3. Next, look at the map and find the Garden House Lawn (#14 on the map). 🌰

Once the beans are **roasted** they're brown and look more like chocolate, These are called **NIBS**.

Ask the Chocolate experts to taste the nibs. Does this chocolate taste like, a candy bar? Describe the taste.



The cacao beans still need more work, this time at a chocolate factory where they are ground into a **POWDER**.

- Help our experts grind the cocoa beans. *Have a friend take a picture of you helping to make the chocolate.* 📷

The powder is then combined with cream and sugar to make the chocolate we eat.

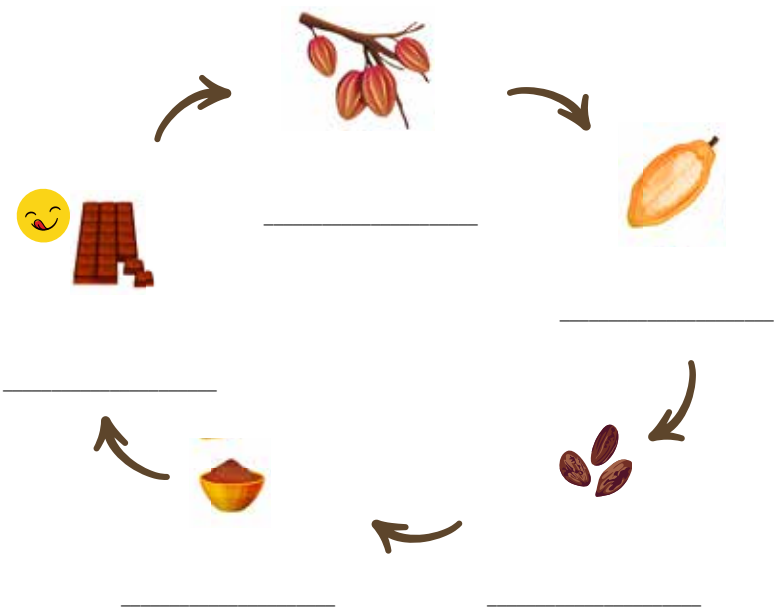
- Ask the Chocolate experts to taste the chocolate wafer. How does it taste?



From a cocoa tree to **CANDY BAR** sure takes a lot of work, but it is worth it!

4 . All Great explorers record their adventures

Let's review. There are many steps to making a chocolate bar. Use the clues from above, fill in the name of the process.



Take your completed mission back to where you started to collect your limited edition pin.



Buildings, Exhibits and Collections

- | | | |
|--|---|--|
| 1 Jean Ellen Shehan Visitor Center, The Shop & American Orchid Society Library | 12 Learning Garden | 24 Wings of the Tropics Butterfly Exhibit at The Clinton Family Conservatory |
| 2 Geiger Family Tropical Flower Garden | 13 Nell Montgomery Garden House | 25 Glasshouse Café |
| 3 Adam R. Rose & Peter R. McQuillan Arts Center | 14 Garden House Lawn | 26 Paul and Swanee DiMare Science Village |
| 4 Richard E. Danielson Vine Pergola | 15 Liberty Hyde Bailey Palm Glade | 27 Dr. Jane Hsiao Laboratories: Microscopy Lab, Dr. Raymond Baddour DNA Lab; The Million Orchid Project Lab; Vollmer Metamorphosis Lab |
| 5 Sibley Victoria amazonica Pool | 16 Rainforest Rock Garden | 28 Joyce and M. Anthony Burns Science Building |
| 6 Tropical Flowering Tree Arboretum | 17 Cycad Circle | 29 Richard H. Simons Rainforest, Cloud Forest & National Orchid Garden |
| 7 Lin Lougheed Spiny Forest of Madagascar | 18 Moos Sunken Garden | 30 NASA Innovation Studio |
| 8 The Gatehouse | 19 Col. Robert Montgomery Palmetum | 31 Garden Club of America Amphitheater & Lougheed Palm Grove |
| 9 Allée & Overlook Vista | 20 The Bruce and Martha Clinton Children's Education Building | |
| 10 Corbin Education Building | 21 The Martha O. Clinton Children's Garden | |
| 11 Lisa D. Anness South Florida Butterfly Garde | 22 Angie and Bill Whitman Tropical Fruit Pavilion | |
| | 23 Tropical Plant Conservatory & Rare Plant House | |